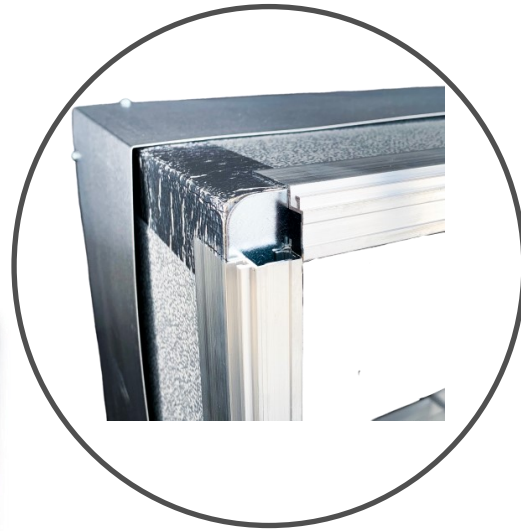
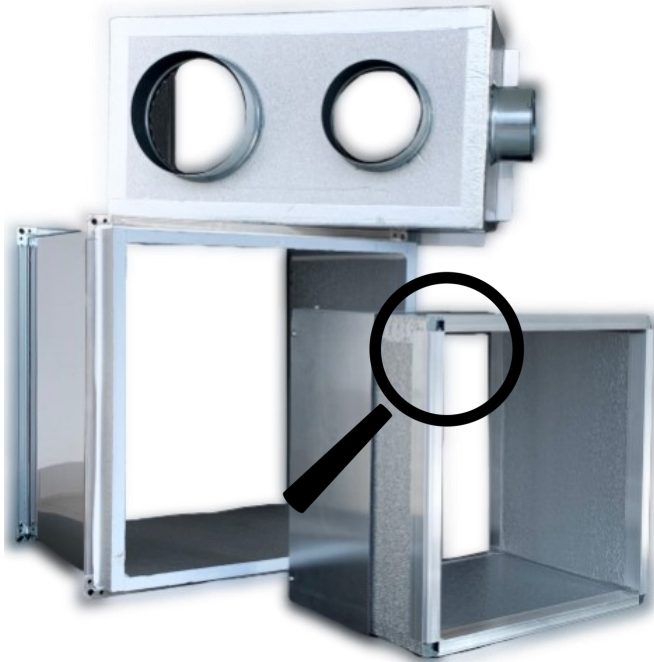


## Colette air ducts



Colette air ducts are perfectly airtight and insulated air ducts.

They are a combination of our standard metal and pir air ducts.

They are almost 100% airtight, thanks to its unique construction and socket plug connections.

### OUTSIDE

1—standard galvanized ducts—sendzimir galvanized—thickness 0.8.

2—standard stainless steel tubes—can be made in stainless steel 304 or stainless steel 316.

### INSIDE

C2Pir duct— 20 or 40 mm thickness

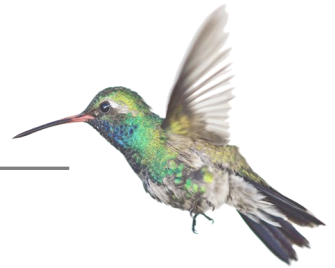
Glued to metal duct and/or glued to each other

TF C2Pir - zie pir kanalen TF

Glue : Meiboom Unicontact

Sealing : sikaflex 11 fc





## Colette air ducts

### Thickness metal + frame + connection

Air ducts are standard made in 0.8 mm plate thickness.

Air ducts are manufactured in such a way that they will be sufficient rigidity against deformations and annoying vibrations.

Clima Construct always uses standard “DS” (double seal) frame profiles to guarantee high quality.

These profiles, pre-assembled with butyl seams, enable the production process to achieve the tightness class C “according to EN 14239”. Due to the extra sealing we can obtain tightness class D.

Longitudinal connections between the parts themselves are in principle made in a seamed connection. The connection used is of the Pittsburgh long seam type.

### PIR inside

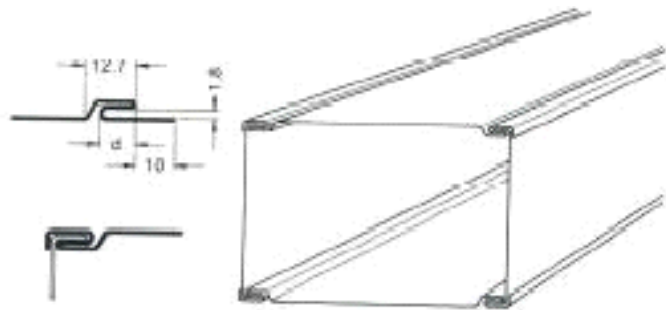
One or two layers of PIR-duct are applied inside the metal duct.

The glue is sprayed over the entire surface for fixation.

PIR plate : C2PIR plate aluminium -

LxWxD=3000x1200x20mm

Polyisocyanurate (PIR) foam board 35kg/m<sup>3</sup> density, thickness 20 mm, cladding 60 micron aluminum foil.



sity,

### Connections + sealing

A two step connection of the air ducts :

- 1) a socket plug connection of the PIR plates
- 2) the frame connection of the metal channels.

All seams are sealed with mastic standard SikaFlex.

(depending on the application, special silicone can be used—eg with particularly dry air)

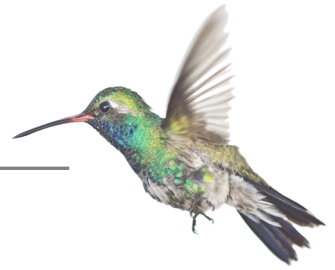
With this method of processing we have a 4-fold seal between the different channel parts.

### Dimensions

The nominal dimensions of the air ducts are stated in mm and refer to the internal dimensions with a tolerance of  $\pm 2$  mm at a side up to and including 1200 mm and  $\pm 4$  mm at a side more than 1200 mm.

The dimensions are standardized to Eurovent Recommendation No. 2/3 dated 1976 and can be selected as indicated in the table for standard dimensions.

In practice, however, all duct sizes are possible, with a minimum of 100 mm



## Colette air ducts

### Suspension

The air ducts are fixed or suspended in a way that the duct parts with components are a stable and look like one piece.

This is the most common construction:

- consoles:  
galvanized or at least finished with zinc dust paint, which are used for attachment to a building construction.

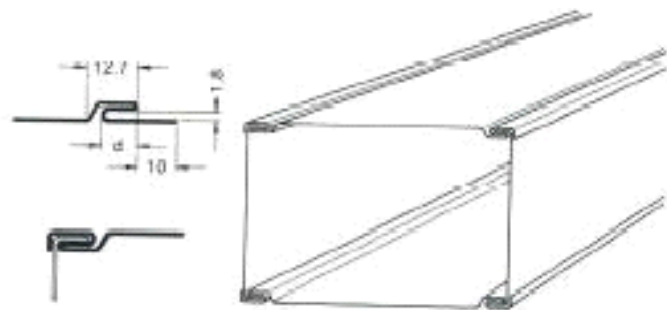
- suspension constructions:  
with enough strength so the total weight of the air ducts, including the interposed components, is transferred to the structural suspension points by threaded rods.

When determining the maximum permissible length of the threaded rods, the required stability is taken into account. The suspension is composed of a top or bottom bracket with threaded rods at least M6 along the channel.

The distance between these threaded rods is maximum 100 mm and minimum 30 mm bigger than the duct width, depending on the presence of external insulation.

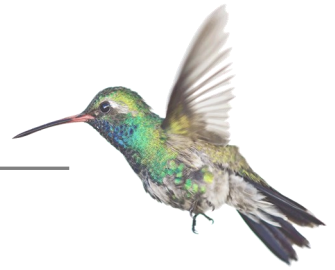
The brackets, with a mutual distance of 2500 - 3000 mm, can be made in a profile form, so that sufficient stiffness is obtained.

With shaft ducts, consoles can be used against the wall or profiles can be used to support the channels on the floor.



Plastic strips are fitted between the air ducts and the brackets if there is a risk of electrochemical stress corrosion cracking.

If additional provisions against vibration and/or sound transmission are required, these must be specified in detail.

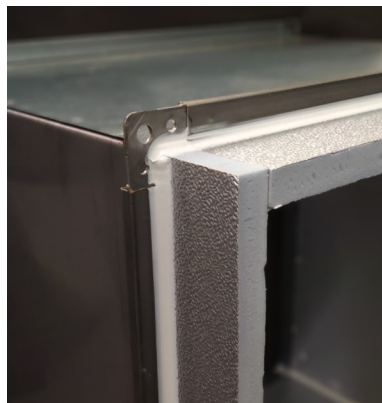


## Colette air ducts

### Bends

Due to the construction, the bends cannot be made in a round shape. Bends are executed in 45° shape.

Blades are not used.



### Reducers

Reducers are made as short as possible, whereby the top angle can be maximum 60°.

